DOCUMENT RESUME

ED 095 200 TM 003 872

AUTHOR Woog, Pierre; Gellman, Estelle
TITLE The Surveying of the Level of Individualization in the Classroom.
PUB DATE [Apr 74]
NOTE 9p.; Paper presented at the Annual Meeting of the American Educational Research Association (59th, Chicago, Illinois, April 1974)

EDRS PRICE MF-$0.75 HC-$1.50 PLUS POSTAGE
DESCRIPTORS *Classroom Observation Techniques; Elementary Grades; *Individualized Instruction; Scoring; Test Construction; Test Validity
IDENTIFIERS *Individualization of Instruction Scale

ABSTRACT

The construction, validation, scoring techniques, uses, and constraints of the "I" Scale are presented. The "I" Scale was originally developed to measure the effect of a three district Title III project which sought to raise the level of individualization within the classroom. The paper traces the theoretical stance of individualization as operationalized in the scale and reports the relationship between pupil performance and the level of individualization. This scale makes a noteworthy contribution toward both the operationalizing of individualization and the surveying of the level of individualization within a school district at any given time. (Author)

THE SURVEYING OF THE LEVEL OF INDIVIDUALIZATION IN THE CLASSROOM

Pierre Woog Hofstra University
Estelle Gellman Hofstra University

Presented at the American Educational Research Association meeting, Chicago, Illinois, 1974

The I-Scale was originally developed in 1969 at the Bureau of Educational Evaluation, BEE, at Hofstra University by Drs. Estelle Gellman and Pierre Woog to evaluate an ESEA title III project concerned with implementing individualized instruction in three school districts in Connecticut.[1] The definition of individualization upon which the project was based was derived from Charles Danowski's work at the Institute of Administrative Research at Teachers College. Danowski listed twelve polar characteristics of individualizing classrooms[2] which he believed constituted individualization.[3] From these twelve characteristics an observation schedule for assessing the degree of individualization within a classroom was constructed at BEE. Ten of the twelve characteristics were operationalized within six scale variables and an observation instrument was developed within the confines of two major constraints: a) the observation was set for forty-five minutes in duration, and b) the observer was not free to interact with the teacher, the students, or products of the teacher or students. A unique feature of the scale was a blind imposed between the observer and the evaluator. The observers merely noted events within the classroom in a set format, but were unaware of how scores were derived from these notations. This blind was imposed for two reasons. First, it minimized the threat on the part of the observed teacher. Second, it minimized possible observer bias; the observer did not know precisely the format of evaluating the data, and the evaluator did not know the classroom.

---

[1] Hale, Robert G., Sr. and Gerhard, Muriel (Project Directors), ESEA Title III Project #69-1000, A Model Program, 1969-1971. The project was designed to train teachers for their roles in individualized learning programs in the Branford, North Haven and Norwalk public schools.

[2] See Appendix

[3] Danowski, Charles B., Teachers Who Individualize Instruction; Commission Study, No. 1, New York: Institute of Administrative Research, Teachers College, Columbia University, 1965.

Once the scale was developed, it was piloted locally to obtain inter-judge reliability; overall .89. Evidence of validity was obtained by conferring with Danowski, embarking upon a rating scale study, and comparing I scores in the field with observers' subjective assessments of the degree to which the classes were individualized.[4]

The preliminary evidence of the reliability and validity of the instrument was considered satisfactory, and the resultant scale was used for two years in the Title III project. A report on the development of this preliminary use of the instrument for assessing individualization was presented at the 1970 North-East Educational Research Association Convocation.[5]

The scale has since been used extensively in the Hempstead School District, and by staff from the Board of Cooperative Educational Services in Nassau County. In all cases, the instrument has been used as a pre-post measure with intervening in-service training. At all times it has reflected significant differences, $p < .05$, in the level of individualization as measured. Totally, the instrument has been administered in more than 350 classrooms ranging from kindergarten to twelfth grade. The ability of the measure to "pick up" intentional change becomes further evidence of the strength of its validity.

A study attempting to validate the I-Scale's predictive validity in terms of pupil performance was conducted in Spring 1973. The question posed was whether students in highly individualized classes, as measured, would show better achievement, as measured, than would those students in less highly

---

[4] For more detailed information concerning the development of the instrument, see Gellman, E. and Woog, P. Interim Evaluation of ESSA Title III Project #69-1000, A Model Program. Bureau of Educational Evaluation, Hofstra University, 1970.

[5] Gellman, E. An Instrument for the Measurement of Individualization, in Woog, P. (organizer), "Individualization: A Cooperative Venture Between The University And The School", A NERA Symposium, Grossinger's, New York, 1970.

individualized classrooms? The study was of particular interest if one perceives individualization as not an end, but rather an intervention technique of instruction that purports to result in higher achievement of whatever type.

Sixty-two classes, with more than 1500 students, constituted the sample. All classes within a school district, grades two through six, were administered the I Scale in September 1971. Each teacher's resultant score was used as a predictor, with criterion scores being class means on the Metropolitan reading and math achievement tests which were administered in May of 1972. It was hypothesized that a significant correlation would be found between teachers' I score and class mean achievement. The resultant r's were .0529 between reading and level of individualization and .000 between math and level of individualization. In this study, a significant relationship was not found between level of individualization, as measured, and achievement.

The study can be faulted on many counts. First, it was found that no standard scores which directly enable classes of different levels to be compared are available from the Metropolitan Tests. Thus scores were derived wherein obtained class means were converted to percentiles and then normalized T scores. These transformations may have distorted the data. Second, data collection left something to be desired. Numerous scores were either missing or inappropriately transcribed; in fact, the data showed two classes of eleven and twenty-three students respectively, to be in the seventh grade - a grade in which no students had been tested. Finally, the study was part of an intervention attempt on the part of the district, and post I-Scale scores (April 1972) showed little, if any, variance.[6] It may be that the intervention was so successful that any variance in predictor scores was erased when criteria scores were obtained.

---

[6] Woog, Pierre, An Evaluation of The Degree of Individualization In The Elementary Classrooms As Measured By The I-Scale: Hempstead Public Schools Directed Learning Program 1971-1972. Teaching and Learning Corporation, N.Y. 1972.

It would be suggested that further, better controlled studies be undertaken to assess the relationship of individualization as measured, and pupil performance. It may also be that generalized teaching methods may be of less importance than the match between specific methods and teacher personality variables in maximizing pupil performance.

Combs, 1969 [7] states: If the self as instrument concept of effective operation in the helping professions is valid, then the search for "right" methods is doomed before it begins. Since helpers as persons are unique, the hope of finding a "common uniqueness," by definition, is a hopeless search. It occurred to us then that perhaps the question of methods in the helping professions is not a matter of adopting the "right" method, but a question of the helper discovering the right method for him. That is to say, the crucial question is not "what" method, but the "fit" of the method, its appropriateness to the self of the helper, to his purposes, his subjects, the situation, and so forth. We now believe the important distinction between the good and poor helper with respect to methods is not a matter of his perceptions or methods, per se, but the authenticity of whatever methods he uses. There is already some evidence for this in our findings that good helpers are self-revealing, involved, and identified.

Use of The I-Scale

For those using the I-Scale, it must be cautioned that the I-Scale does not directly measure the quality of instruction. It is possible that a relatively high I score can be obtained, and yet the most sterile, and primitive learning conditions exist. Furthermore, it should be noted that the I-Scale measures only a limited difinition of individualization. The scale was designed to measure Danowski's [8] definition of individualization, and is limited to the

---

[7] Combs, Arthur W. Florida Studies In The Helping Professions. University of Florida Press, Gainesville, 1969. pps. 75, 76.

[8] Danowski, Charles B. Op. cit.

following variables which were developed to include the Danowski variables indicated:

I-Scale Variable	Danowski Characteristic
1. Large group instruction is not used exclusively	1T, 2T, 2P
2. The entire observation time is not dominated by the teacher	3T, 5T
3. In large group discussion, the teacher is willing to momentarily divert from the specific prepared lesson to accommodate a student or student's question	4T
4. Students initiate specific learning tasks	1P, 5P
5. When a class is grouped for instruction, a group or groups are discussing the instructional task without the presence of an adult	3P
6. Products of self-initiated student acts are in evidence in the classroom	4P

A score of zero for a variable indicates that the variable was totally unobserved. A score of one through four indicates the degree to which that variable was observed; four being the maximum.

Variables one and two constitute nearly one-half of the total I score. They may be viewed as the most elementary and/or superficial aspect of individualization for they merely examine the degree to which the teacher does not teach the entire group as though that group was an individual. Variables three through six are more subtle for they examine the substance of interactions and pupil-initiated acts within the classroom.

A useful "rule of thumb" in the interpretation of scores is that a score of zero indicates a total lack of individualization, a score of one through twenty generally indicates a superficial degree of individualization, and a score of greater than twenty indicates that more individualization, as defined by the scale, is occurring.

In those cases where the I-Scale has been used, it has been felt by the district that the scores did provide useful data. It must be cautioned, however, that the I scores can only be useful in those instances where information is wanted on the particular variables that the scale measures.

As used thus far in school settings, the observers have always been naive as to how the I score is obtained. Past observers have been given an observation form and trained in the recording of their observations, but were not told how the observations would be used in determining the total score. Thus, some degree of observer bias was assumedly eleminated. This procedure is not absolutely necessary for obtaining data, of course, but it is advised. It is most important, however, that adequate training in the use of the observation form be given, and that observers are not sent to the field until adequate inter-observer correlations are obtained on joint observations of the same classroom. Detailed information on the training and scoring procedures is being prepared for publication, and is now available from the Bureau of Educational Evaluation, Hofstra University, Hempstead, New York, 11550.

APPENDIX

Danowski's Polar Characteristics Distinguishing Individualizing From Non-Individualizing Teaching Practices

POLAR CHARACTERISTICS DISTINGUISHING INDIVIDUALIZING FROM NON-INDIVIDUALIZING TEACHING PRACTICES

	Observed Behavior in Classrooms of Individualizing Teachers	Observed Behavior in Classrooms of Non-Individualizing Teachers
	Teacher Behavior	
	Individualizing Pole	Non-Individualizing Pole
1T	Objectives	
	The teacher pursues multiple objectives, each objective related to a specific pupil or a small group of pupils.	The teacher pursues a single preselected objective applying it without variation to all pupils in the class.
2T	Planning and Preparation	
	The teacher's planning and preparation are in terms of individual students.	The teacher's planning and preparation are in terms of some single class norm. (This norm may be the average of the three or four "best" students.)
3T	Communication-Direction	
	The teacher communicates with individuals in the class while other individuals of the class remain engaged in different activities.	The teacher communicates with all pupils in the entire class at one and the same time (i.e., "out loud"), even when addressing one youngster.
4T	Communication-Message	
	The teacher uses feedback information pupils as a basis for modifying the message being communicated.	The teacher's preselected communication is unmodified by circumstances other than his own objectives, or by variation in its reception by individual pupils.
5T	Function	
	The teacher's function is primarily observation of evidence of learning, or the lack of it, and the motivation and guiding of students to independent learning activity.	The teacher functions primarily as a purveyor of information.

6T	Evaluation	
	The teacher's evaluation of each pupil is based on the latter's individual growth and development	The teacher evaluates the pupils en masse with a predetermined standard as the measure of success.

PUPIL BEHAVIOR

1P	Objectives	
	The pupils pursue objectives which they themselves have established.	The pupils pursue objectives which the teacher has established.
2P	Planning and Preparation	
	The pupil's planning and preparation have been unique in that they are engaged in independent work, study, practice, or demonstration.	The pupil's planning and preparation have been by teacher's direction in that all pupils are engaged in the same activity.
3P	Communication-Direction	
	The pupils are engaged in small group activity in which discussion is considered a function of learning.	The pupil's participation in class is restricted to asking or answering questions of the teacher.
4P	Communication-Message	
	The pupils are encouraged to manifest originality, creative productivity, and purposeful divergence.	The pupils are restricted to recitation of predigested material and to conformity.
5P	Function	
	The pupils are active participants in learning activities.	The pupils are passive recipients of knowledge.
6P	Evaluation	
	The pupil evaluates his own growth and development.	The pupil makes no self-evaluation but accepts teacher's opinion.